

Abstract

Systems and methods for applying ultrasound energy to a body region. The systems and methods provide an ultrasound applicator including a housing, an ultrasound transducer carried by the housing, and a chamber sized to hold an acoustic coupling media subject to a pressure in acoustic communication with the ultrasound transducer. The systems and methods generate electrical signals to operate the ultrasound transducer to output acoustic energy at a selected intensity level. The systems and methods sense at least one system parameter and compare the sensed system parameter to a desired level. The systems and methods vary the pressure in the chamber based, at least in part, upon the comparison.